

## CLAIMS

What is claimed is:

1. A multi-color electrophoretic image display, comprising:

a first electrode defining a plurality of cells;

a transparent second electrode separated from the first electrode by a space;

an electrophoretic fluid disposed in the space between the first and second electrodes, the electrophoretic fluid including a plurality of electrophoretic particles dispersed in the cells of the first electrode, the electrophoretic particles in the cells being electrophoretically movable to and from adjacent positions on the transparent second electrode;

wherein the electrophoretic particles, in selected ones of the cells that have been electrophoretically moved to their adjacent positions on the transparent second electrode, reflect light entering the display thereby forming an image which can be more than one color.

2. The display according to claim 1, wherein the transparent second electrode includes rows of electrically conductive, transparent electrode lines.

3. The display according to claim 1, wherein the cells define electrically conductive electrode pads.

4. The display according to claim 3, wherein the electrode pads are elongated.

5. The display according to claim 1, wherein the cells are elongated.

6. The display according to claim 1, wherein the transparent second electrode includes a multi-color light filter array that filters and thereby colors the light reflected by the electrophoretic particles.

5 7. The display according to claim 6, wherein the filter array includes blue, red, and green filters.

8. The display according to claim 1, wherein the electrophoretic particles are of a light color.

9. The display according to claim 1, wherein the electrophoretic particles are polymer coated.

10. The display according to claim 1, wherein the first electrode includes a plastic planar member having an inner surface and an outer surface, the inner surface defining each of the cells.

11. The display according to claim 1, wherein the transparent second electrode includes a transparent plastic planar member having an inner surface and an outer surface, the  
20 outer surface having a multi-color light filter array disposed thereon.

12. The display according to claim 1, further comprising a spacer joining the first and second electrodes, wherein the electrophoretic fluid is retained in the space between the electrodes by the spacer.

5 13. The display according to claim 12, wherein the spacer is slightly taller than the cells.

14. The display according to claim 1, wherein each of the cells forms a pixel.

Sub 24  
15. A multi-color electrophoretic image display comprising pixels of at least two different colors, the pixels defined by electrophoretic particle containing cells formed on an electrode, wherein the electrophoretic particles, in selected ones of the cells that have been displayed, reflect light entering the display thereby forming an image which can be more than one color.

16. The display according to claim 15, further comprising a second transparent electrode, the electrophoretic particles in the cells being electrophoretically movable to and from adjacent positions on the transparent second electrode.

Sub 25  
17. The display according to claim 16, wherein the transparent second electrode includes a multi-color light filter array that filters and thereby colors light reflected by the electrophoretic particles.

18. A multi-color electrophoretic display, comprising:  
a first set of pixels including electrophoretic particles which display a first color;  
a second set of pixels including electrophoretic particles disposed adjacent the  
first set of pixels, the second set of pixels displaying a second color different from the first color;  
5 and  
wherein the particles of the first and second set of pixels are selectively displayed  
to provide an image which can be more than one color.

19. The display according to claim 18, further comprising a third set of pixels  
adjacent the first and second set of pixels, the third set of pixels including electrophoretic  
particles which display a third color different from the first and second colors.

20. The display according to claim 19, wherein the first, second, and third sets of  
pixels are disposed in the same plane.

21. The display according to claim 19, wherein the first, second, and third sets of  
pixels are disposed in different planes.

22. The display according to claim 18, wherein the first and second sets of pixels are  
20 disposed in the same plane.

23. The display according to claim 19, wherein the first and second sets of pixels are  
disposed in different planes.

24. The display according to claim 18, further comprising a multi-color light filter array that filters and thereby colors the light displayed by the electrophoretic particles of the first and second sets.

25. The display according to claim 24, wherein the filter array includes filters selected from the group consisting of blue light filters, red light filters, and green light filters.

26. The display according to claim 18, wherein the electrophoretic particles of the first set are selected from the group consisting of blue electrophoretic particles, red electrophoretic particles, and green electrophoretic particles and the electrophoretic particles of the second set are selected from the group consisting of blue electrophoretic particles, red electrophoretic particles, and green electrophoretic particles.

27. The display according to claim 18, wherein the electrophoretic particles are of a light color.

28. A color electrophoretic display, comprising:  
a plurality of cells each containing electrophoretic particles, with each cell in the plurality capable of displaying at least one of three selected primary colors, when the particles in the cell are moved from a first rest position to a second display position on the cell,  
an electrode coupled to each of the cells and operative when biased to move the particles from the first rest position to the second display position to cause the primary colors to

be displayed in the second display position to thereby cause the display to provide full color capability according to particle position in the cells.

29. The display according to claim 28, further comprising a multi-color light filter  
5 array that filters and thereby colors the light displayed by the electrophoretic particles.

30. The display according to claim 29, wherein the filter array includes blue, red, and green light filters.

31. The display according to claim 28, wherein the electrophoretic particles are of a  
10 light color.

32. The display according to claim 28, wherein the electrophoretic particles are at  
least three different colors, the particles in any given one of the cells being of the same color.

33. The display according to claim 28, wherein the cells are disposed in the same  
plane.

34. The display according to claim 28, wherein the cells are disposed in different  
20 planes.

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